

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: John C. Lynch et al.

Serial No. 09/672,821

Filed: 09/29/2000

For: **MEDIA GATEWAY CONNECTION INFORMATION RECOVERY**

Examiner: Gerezgiher, Yemane M.

Art Unit: 2144

Mail Stop Appeal Brief – Patents

Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450

Sir:

An **APPEAL BRIEF** is filed herewith. The Appellants also enclose a payment in the amount of \$500.00 as required by 37 C.F.R. § 1.17(c). If any additional fees are required in association with this appeal brief, the Director is hereby authorized to charge them to Deposit Account 50-1732, and consider this a petition therefor.

APPEAL BRIEF

(1) REAL PARTY IN INTEREST

The real party in interest is the assignee of record, i.e., Nortel Networks Limited of 2351 Boulevard Alfred-Nobel, St. Laurent, Quebec Canada H4S 2A9, which is wholly owned by Nortel Networks Corporation, a Canadian corporation.

(2) RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences to the best of the Appellants' knowledge.

(3) STATUS OF CLAIMS

Claims 1-23 were rejected with the rejection made final on October 18, 2006.

Claim 24 was cancelled.

Claims 1-23 are pending and are the subject of this appeal.

(4) STATUS OF AMENDMENTS

For the purposes of this appeal, the amendments made after the Final Office Action mailed October 18, 2006 have not been entered.

(5) SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is designed to facilitate operation of a backup call server (Figure 1, element 106Y; see also, Specification, p. 6, ll. 19-20). In particular, a packet-based network (Figure 1, element 100; see also, Specification, p. 5, l. 12) has two call servers (Figure 1, elements 106X and 106Y; and Figure 2, element 200; see also, Specification, p. 5, ll. 13-14 and ll. 23-24). The primary call server (Figure 1, element 106X; see also, Specification, p. 6, ll. 20) handles the bulk of the call processing, but may be subject to the occasional failure (Specification, p. 6, ll. 22 and 27-30). When a failure occurs, call processing shifts to the backup call server (Specification, p. 6, l. 27 through p. 7, l. 2; and p. 7, ll. 16-18). For the backup call server to be aware of currently existing call flows, the backup call server sends requests to media gateways (Figure 1, elements 104A-D; see also, Specification, p. 5, ll. 13 and 18-19) about active connections (Specification, p. 6, ll. 20-21; and p. 7, ll. 2-9). The media gateways respond to these requests with information about the active connections (Specification, p. 6, ll. 20-21; and p. 7, ll. 2-9). In short, the backup call server proactively secures information about the active connections rather than rely on the active call server sending the information to the backup call server (Specification, p. 6, ll. 20-21; and p. 7, ll. 2-9).

Claim 1 recites at a backup call server (Figure 1, element 106Y; and Figure 2, element 200; see also, Specification, p. 3, ll. 7-12; p.4, l. 2; and p. 5, ll. 14 and 23-24) in a packet-based telephony network (Figure 1, element 100; see also, Specification, p. 3, l.6; p. 4, l.2; and p. 5, l. 12), a method of maintaining a record (Figures 4, 4A, and 4B, element 400; see also, Specification p. 3, ll. 24-26; p. 4, ll. 2-6; and p. 8, l. 26 through p. 9, l. 4) of an active media connection comprising:

sending a request, from the backup call server, to a media gateway (Figure 1, element 104A), for information regarding said active media connection (Specification, p. 6, ll. 20-21; p. 7, ll. 2-4; and p. 8, ll. 12-13); and

receiving said information at the backup call server (Specification, p. 7, ll. 4-9; and p. 8, ll. 13-25).

Dependent claim 11 further defines independent claim 1 and recites wherein said received information includes an indication of Quality of Service setting associated with said active media connection (Specification, p. 8, ll. 27-31).

Claim 12 recites a backup call server (Figure 1, element 106Y; and Figure 2, element 200; see also, Specification, p. 5, ll. 14 and 23-24) operable to:

send a request, to a media gateway (Figure 1, element 104A; and Figure 3, element 300; see also, Specification, p. 5, ll. 13-20; p. 6, l. 3; and p. 10, l. 6), for information regarding an active media connection (Specification, p. 6, ll. 20-21; p. 7, ll. 2-4; and p. 8, ll. 12-25); and receive said information at the backup call server (Specification, p. 7, ll. 4-9; and p. 8, ll. 13-25).

Claim 13 recites a computer readable medium containing computer-executable instructions (Figure 2, element 210; see also, Specification, p. 5, l. 26 through p. 6, l. 2) which, when performed by a processor (Figure 2, element 204; see also, Specification, p. 5, l. 24 through p. 6, l. 2) in a backup call server (Figure 1, element 106Y; and Figure 2, element 200; see also, Specification, p. 5, ll. 14 and 23-24) in a packet-based telephony network (Figure 1, element 100; see also, Specification, p. 5, l. 12), cause the processor to:

send a request, from the backup call server to a media gateway (Figure 1, element 104A), for information regarding an active media connection (Specification, p. 6, ll. 20-21; p. 7, ll. 2-4; and p. 8, ll. 12-13); and receive said information at the backup call server (Specification, p. 7, ll. 4-9; and p. 8, ll. 13-25).

Claim 14 recites at a backup call server (Figure 1, element 106Y; and Figure 2, element 200; see also, Specification, p. 3, ll. 7-12; p. 4, ll. 2; and p. 5, ll. 14 and 23-24) in a packet-based telephony network (Figure 1, element 100; see also, Specification, p. 3, l. 6; p. 4, l. 2; and p. 5, l. 12), a method of acquiring a record (Figures 4, 4A, and 4B, element 400; see also, Specification p. 3, ll. 24-26; p. 4, ll. 2-6; and p. 8, l. 26 through p. 9, l. 4) of an active media connection comprising:

receiving an indication of a failure of a primary call server (Figure 1, element 106X; see also, Specification, p. 6, ll. 27-30), said primary call server, prior to said failure, supporting said active media connection (Specification, p. 6, ll. 27-30);

responsive to said receiving, sending a request, from the backup call server to a media gateway (Figure 1, element 104A; and Figure 3, element 300; see also, Specification, p. 5, ll. 13-20; p. 6, l. 3; and p. 10, l. 6), for information regarding said active media connection (Specification, p. 6, ll. 20-21; p. 7, ll. 2-4; and p. 8, ll. 12-13); and

receiving said information at the backup call server (Specification, p. 7, ll. 4-9; and p. 8, ll. 13-25).

Claim 15 recites at a media gateway (Figure 1, element 104A; see also, Specification, p. 4, ll. 7-8; p. 4, ll. 11-12; and p. 5, ll. 13-18) in a packet-based telephony network (Figure 1, element 100; see also, Specification, p. 4, l. 8 and p. 5, l. 12), a method of providing a record of an active media connection (Specification, p. 4, ll. 8-9) comprising:

receiving, from a backup call server (Figure 1, element 106Y; Figure 2, element 200; see also, Specification, p. 5, ll. 14 and 23-24), a request for information regarding said active media connection (Specification, p. 6, ll. 20-21; p. 7, ll. 2-4; and p. 8, ll. 12-13); and

responsive to said request, transmitting information regarding said active media connection to said backup call server (Specification, p. 7, ll. 4-9; and p. 8, ll. 13-25).

Dependent claim 20 further defines independent claim 15 and recites wherein said transmitted information includes an indication of Quality of Service setting associated with said active media connection (Specification, p. 8, ll. 27-31).

Claim 21 recites a first media gateway (Figure 1, element 104A; and Figure 3, element 300; see also, Specification, p. 5, ll. 13-20; p. 6, l. 3; and p. 10, l. 6) comprising:

a receiver for receiving an incoming media flow (Figure 3, element 316; see also, Specification, p. 6, ll. 4-8; and p. 10, ll. 6-9);

a digital signal processor communicatively connected to said receiver for processing said media flow (Figure 3, element 304; see also, Specification, p. 6, ll. 8-10; and p. 10, ll. 11-15);

a transmitter communicatively connected to said digital signal processor for transmitting said media flow to a second media gateway (Figure 3, element 302; see also, Specification, p. 6, ll. 4-8); and

a processor operable to (Figure 3, element 308; see also, Specification, p. 6, ll. 12-14; and p. 10, ll. 16-21):

receive, from a backup call server (Figure 1, element 106Y; and Figure 2, element 200; see also, Specification, p. 5, ll. 14 and 23-24), a request for information regarding said media flow (Specification, p. 6, ll. 10-15 and 20-21; p. 7, ll. 2-4; and p. 8, ll. 12-13); and

responsive to said request, transmit information regarding said media flow to said backup call server (Specification, p. 6, ll. 10-15; p. 7, ll. 4-9; and p. 8, ll. 13-25).

Claim 22 recites a computer readable medium containing computer-executable instructions (Figure 3, element 314; see also, Specification, p. 6, ll. 12-15) which, when performed by a processor (Figure 3, element 308; see also, Specification, p. 6, ll. 12-14; and p. 10, ll. 16-21) in a media gateway (Figure 1, elements 104A-C; and Figure 3, element 300; see also, Specification, p. 4, ll. 7-8; p. 4, ll. 11-12; and p. 5, ll. 13-20; p. 6, l. 3; and p. 10, l. 6), cause the processor to:

receive, from a backup call server (Figure 1, element 106Y; and Figure 2, element 200; see also, Specification, p. 5, ll. 14 and 23-24), a request for information regarding an active media connection (Specification, p. 6, ll. 10-15 and 20-21; p. 7, ll. 2-4; and p. 8, ll. 12-13); and responsive to said request, transmit information regarding said active media connection to said backup call server (Specification, p. 6, ll. 10-15; p. 7, ll. 4-9; and p. 8, ll. 13-25).

Claim 23 recites a packet-based telephony network system (Figure 1, element 100; see also, Specification, p. 4, ll. 15-16 and p. 5, l. 12) comprising:

a packet based data network (Figure 1, element 100; see also, Specification, p. 4, l. 16 and p. 5, l. 12);

a telephone station apparatus (Figure 1, elements 102A, 102B, 102CA, 102CB, and 102CC; see also, Specification, p. 4, ll. 16-17 and p. 5, ll. 18-21; and p. 6, ll. 27-29);

a media gateway (Figure 1, elements 104A-C; and Figure 3, element 300; see also, Specification, p. 5, ll. 13-20; p. 6, l. 3; and p. 10, l. 6) communicatively connected to said telephone station apparatus and said data network (Specification, p. 4, ll. 17-18);

a primary call server (Figure 1, element 106X; and Figure 2, element 200; see also, Specification, p. 5, ll. 13-14 and 23-24) communicatively connected, over said data network, to said media gateway (Specification p. 4, ll. 18-19); and

a backup call server (Figure 1, element 106Y; and Figure 2, element 200; see also, Specification, p. 5, ll. 14 and 23-24) communicatively connected, over said data network, to said media gateway (Specification p. 4, ll. 19-21) and operable to:

send a request, to said media gateway, for information regarding an active media connection terminated at said primary server (Specification, p. 4, ll. 19-22 and p. 6, ll. 20-21; p. 7, ll. 2-4; and p. 8, ll. 12-13); and

receive said information (Specification, p. 4, ll. 19-23; p. 7, ll. 4-9; and p. 8, ll. 13-25).

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Whether claims 1, 6-15, 17-20, and 22 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Number 6,205,557 B1 to *Chong et al.* (hereinafter “*Chong*”) in view of U.S. Patent No. 5,430,709 to *Galloway* (hereinafter “*Galloway*”) and further in view of U.S. Patent Number 5,812,748 to *Ohran et al.* (hereinafter “*Ohran*”).

B. Whether claims 2-5 and 16 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over *Chong* in view of *Galloway* and *Ohran* and further in view of what would have been obvious to one of ordinary skill in the art at the time the invention was made.

C. Whether claims 21 and 23 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,724,747 B1 to *Arango et al.* (hereinafter “*Arango*”) in view of *Ohran*.

(7) ARGUMENT

A. Introduction

The Patent Office has not established a *prima facie* case of obviousness of the claimed invention. More specifically, the Patent Office has not shown where the cited references, either alone or in combination, disclose or suggest all the elements recited in the pending claims. Additionally, the Patent Office has failed to establish the proper motivation for combining the cited references. Particularly, the problems and teachings of the individual references are vastly different from one another such that one skilled in the art would not be motivated to combine the references. Further, the Patent Office has failed to establish how the knowledge of one of ordinary skill in the art would provide the motivation to combine the cited references. The Patent Office also has not provided any evidence to prove the motivation to combine the references. As such, the Appellants request that the Board reverse the Examiner and instruct the Examiner to allow the claims for these reasons.

B. Summary of the References

1. U.S. Patent Number 6,205,557 B1 to *Chong*

Chong relates to copying call information such that in-progress call processing continues if an active call processor fails.¹ More specifically, *Chong* discloses an active call server which

¹ See *Chong*, col. 1, ll. 8-10.

sends call information to a standby call server.² According to *Chong*, the active call server sends the call information to the standby call server during intervals where the active call server is awaiting signaling messages.³

2. U.S. Patent No. 5,430,709 to *Galloway*

Galloway relates to the generation of call records for connections conducted in accordance with TCP/IP protocols.⁴ In particular, *Galloway* avoids problems relating to tracking protocol session interactions.⁵ *Galloway* addresses this problem by providing a method of monitoring communications established over a network between respective pairs of entities for passing protocol data units.⁶

3. U.S. Patent Number 5,812,748 to *Ohran*

Ohran relates to recovering from a computer failure in a system with redundant computers where each of the redundant computers has its own mass storage system.⁷ *Ohran* addresses problems relating to bringing a computer system which has failed into a state consistent with a server computer system that has continued operation during failure of the failed computer system.⁸ *Ohran* solves these problems by switching a mass storage system used for network requests from a failed server computer system to a server computer system which has not failed.⁹ In particular, *Ohran* discloses a backup computer that runs a mass storage access program capable of communicating with a plurality of mass storage emulators.¹⁰ According to *Ohran*, when a failure occurs in a file server computer system, the backup computer becomes the file server.¹¹ Thus, according to *Ohran*, the backup server backs up data on a file server computer.¹²

² *Id.* at Abstract.

³ *Ibid.*

⁴ *See Galloway*, col. 1, ll. 10-11.

⁵ *Id.* at col. 1, ll. 46-47.

⁶ *Id.* at col. 1, ll. 58-61.

⁷ *See Ohran*, col. 1, ll. 17-19.

⁸ *Id.* at col. 2, ll. 38-43.

⁹ *Id.* at col. 3, ll. 22-25.

¹⁰ *Id.* at col. 4, ll. 40-42.

¹¹ *Id.* at col. 4, ll. 30-31.

¹² *Id.* at Abstract and at col. 4, ll. 25-29.

4. U.S. Patent No. 6,724,747 B1 to *Arango*

Arango relates to managing media sessions.¹³ *Arango* addresses problems associated with conventional voice over packet-based network systems.¹⁴ *Arango* addresses these problems by providing a communication system that provides telephone service over a packet based network to subscribers connected to circuit switched switching offices.¹⁵

C. Legal Standards for Establishing Obviousness

Section 103(a) of the Patent Act provides the statutory basis for an obviousness rejection and reads as follows:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Courts have interpreted 35 U.S.C. § 103(a) as a question of law based on underlying facts. As the Federal Circuit stated:

Obviousness is ultimately a determination of law based on underlying determinations of fact. These underlying factual determinations include: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) the extent of any proffered objective indicia of nonobviousness.¹⁶

Once the scope of the prior art is ascertained, the content of the prior art must be properly combined. Initially, the Patent Office must show that there is a suggestion to combine the references.¹⁷ Even if the Patent Office is able to articulate and support a suggestion to combine the references, it is impermissible to pick and choose elements from the prior art while using the application as a template.¹⁸ To reconstruct the invention by such selective extraction constitutes

¹³ See *Arango*, col. 1, ll. 14-15.

¹⁴ *Id.* at col. 1, ll. 25-27.

¹⁵ See *Arango*, col. 12, ll. 50-53.

¹⁶ *Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH*, 45 U.S.P.Q.2d (BNA) 1977, 1981 (Fed. Cir. 1998) (internal citations omitted).

¹⁷ *In re Dembiczak*, 175 F.3d 994 (Fed. Cir. 1999).

¹⁸ *In re Fine*, 837 F.3d 1071 (Fed. Cir. 1988).

impermissible hindsight.¹⁹ After the combination has been made, for a *prima facie* case of obviousness, the combination must still teach or fairly suggest all of the claim elements.²⁰

Some elements may be inherent within the reference. “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.’”²¹ “The mere fact that a certain thing may result from a given set of circumstances is not sufficient.”²² Thus, the possibility that an element may be derived from the reference is insufficient to establish that said element is inherent to the reference.

Whether an element is implicitly or explicitly taught by a reference or combination of references is open to interpretation. While the Patent Office is entitled to give claim terms their broadest reasonable interpretation, this interpretation is limited by a number of factors. First, the interpretation must be consistent with the specification.²³ Second, the broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach.²⁴ Finally, the interpretation must be reasonable.²⁵ This means that the words of the claim must be given their plain meaning unless Appellant has provided a clear definition in the specification.²⁶

If a claim element is missing after the combination is made, then the combination does not render obvious the claimed invention, and the claims are allowable. As stated by the Federal Circuit, “[if] the PTO fails to meet this burden, then the Appellant is entitled to the patent.”²⁷

¹⁹ *In re Gorman*, 933 F.2d 982 (Fed. Cir. 1991).

²⁰ *In re Royka*, 490 F.2d 981 (C.C.P.A. 1974); MPEP § 2143.03.

²¹ *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) (quoting *Cont'l Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991)).

²² *Ibid.* (citation and quotation omitted).

²³ *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000); MPEP § 2111.

²⁴ *In re Cortright*, 165 F.3d 1353, 1359, (Fed. Cir. 1999); MPEP § 2111.

²⁵ *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1369 (Fed. Cir. 2004); MPEP § 2111.01.

²⁶ *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989).

²⁷ *In re Glaug*, 283 F.3d 1335, 1338 (Fed. Cir. 2002).

D. Claims 1, 6-15, 17-20, and 22 Are Patentable over *Chang* in view of *Galloway* and further in view of *Ohran*

1. Neither *Chong*, *Galloway*, nor *Ohran*, Either Alone or in Combination, Discloses or Suggests a Backup Call Server Which Sends a Request to a Media Gateway For Information Regarding an Active Media Connection

Claims 1, 6-15, 17-20, and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Chong* in view of *Galloway* and further in view of *Ohran*. In order to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.²⁸ The Appellants submit that neither *Chong*, *Galloway*, nor *Ohran*, either alone or in combination, discloses or suggests all the features recited in claims 1, 6-15, 17-20, and 22.

To further illustrate, claim 1 recites a method of maintaining a record of an active media connection at a backup call server comprising, among other features, “sending a request, from the backup call server, to a media gateway, for information regarding said active media connection.” Claims 12-14 and 22 include similar features. The Appellants respectfully submit that none of the references, either alone or in combination, discloses or suggests a backup call server which sends a request to a media gateway for information regarding an active media connection for a number of reasons. First, none of the references discloses a media gateway. In maintaining the rejection, the Patent Office equates an interface server disclosed in *Chong* with a media gateway.²⁹ The Appellants respectfully disagree that an interface server may be equated with a media gateway. As defined in *Chong*, an interface server 120 ensures that all bits in a telephone call are received and call information is properly formatted.³⁰ In contrast, a media gateway acts as a translation unit between disparate telecommunications networks thereby enabling multimedia communications across disparate telecommunications. Likewise, neither *Galloway* nor *Ohran*, either alone or in combination, discloses or suggests a media gateway. Accordingly, none of the cited references can disclose or suggest a backup server which sends any type of request to a media gateway, much less a request for information regarding an active media connection.

²⁸ *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. (BNA) 580 (CCPA 1974).

²⁹ See Final Office Action mailed October 18, 2006, p. 5.

³⁰ See *Chong*, col. 2, l. 66 through col. 3, l. 2.

Second, even assuming *arguendo* that the interface server disclosed in *Chong* was somehow a media gateway, a point which the Appellants do not concede, none of the cited references, either alone or in combination, discloses or suggests a backup call server which sends a request to a media gateway for information regarding an active media connection. As correctly pointed out by the Patent Office, neither *Chong* nor *Galloway* discloses or suggests this feature.³¹ In maintaining the rejection, the Patent Office states that *Ohran* discloses this feature in the Title, the Abstract, and at col. 4, ll. 29-46, col. 15, ll. 19-24, and col. 24, ll. 37-43.³² The Appellants respectfully disagree. *Ohran* does not disclose a backup call server. In fact, *Ohran* does not disclose a call server of any type. Instead, *Ohran* discloses a backup computer that runs a mass storage access program capable of communicating with a plurality of mass storage emulators.³³ According to *Ohran*, when a failure occurs in a file server computer system, the backup computer becomes the file server.³⁴ However, nowhere does *Ohran* disclose or suggest that the backup computer sends a request to a media gateway for information regarding an active media connection. Accordingly, the Appellants submit that claims 1, 12-14, and 22 are patentable over the cited references. Similarly, claims 6-10 and 17-19, which ultimately depend from claims 1 or 15, are patentable over the cited references for at least the same reasons along with the novel features recited therein.

Claim 15 recites a method of providing a record of an active media connection at a media gateway which comprises, among other features, “receiving, from a backup call server, a request for information regarding said active media connection.” As discussed above, none of the references, either alone or in combination, discloses or suggests a media gateway. Thus, it follows that none of the references, either alone or in combination, can disclose or suggest a method of providing a record of an active media connection at a media gateway. In addition, as detailed above, neither of the references, either alone or in combination, discloses or suggests a backup call server which sends a request to a media gateway for information regarding an active media connection. Thus, claim 15 is patentable over the cited references.

Claim 11, which depends from claim 1, recites that the “received information includes an indication of Quality of Service setting associated with said active media connection.” Claim 20,

³¹ See Final Office Action mailed October 18, 2006, pp. 6, 7, and 9.

³² *Id.* at p. 7.

³³ See *Ohran*, col. 4, ll. 40-42.

³⁴ See *Ohran*, col. 4, ll. 30-31.

which depends from claim 15, includes similar features. The Appellants submit that none of the references, either alone or in combination, discloses or suggests that information received at a backup server includes an indication of the Quality of Service setting associated with an active media connection. In maintaining the rejection, the Patent Office states that *Galloway* discloses this feature at col. 1, l. 58 through col. 2, l. 37 and col. 2, l. 60 through col. 3, l. 56.³⁵ The Appellants respectfully disagree. The Appellants have reviewed these portions of *Galloway* along with the rest of the reference and submit that nowhere does *Galloway* disclose or suggest the features recited in claim 11. Likewise, the Appellants have reviewed both *Chong* and *Ohran* and respectfully submit that nowhere do these references, either alone or in combination, disclose or suggest that information received at a backup server includes an indication of the Quality of Service setting associated with an active media connection. Thus, in addition to the reasons noted above with respect to claims 1 and 15, claims 11 and 20 are patentable over the cited references.

2. There is No Motivation To Combine *Chong*, *Galloway*, and *Ohran*

Some inventions are combinations of known elements. One of the factors that makes an invention patentable is that there is no suggestion in the prior art to combine the known elements in the manner claimed. The Patent Office has the unenviable task of casting itself back to the time of the invention, examining the references, and determining if the invention was obvious to someone skilled in the art. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.³⁶ “There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art.”³⁷ Furthermore, the Patent Office is not allowed to rely on hindsight reconstruction or use the Appellant’s disclosure as a template to pick and choose elements from the prior art and reassemble the Appellant’s claimed invention. Rather, as the Federal Circuit has stated with unusual clarity, the Patent Office must prove, through actual evidence, that there

³⁵ See Final Office Action dated October 18, 2006 at page 6.

³⁶ *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d (BNA) 1430 (Fed. Cir. 1990).

³⁷ *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d (BNA) 1453, 1457-58 (Fed. Cir. 1998).

is a motivation to combine the references.³⁸ The Patent Office is not free to ignore the instructions in *Dembiczak*, even though the MPEP has not been updated to reflect this decision.

There is no motivation to combine *Chong*, *Galloway*, and *Ohran*. Both the nature of the problem to be solved and the teachings in *Chong* differ from the problem to be solved and the teachings in both *Galloway* and *Ohran*. *Chong* relates to copying call information such that in-progress call processing continues if an active call processor fails.³⁹ More specifically, *Chong* addresses problems associated with periodically updating a standby call processor when failure occurs between the periodic update.⁴⁰ *Chong* addresses these problems by providing a redundant call processing system that maintains, in a standby call server, information contained within a call server which pertains to a call.⁴¹

On the other hand, *Galloway* relates to the generation of call records for connections conducted in accordance with TCP/IP protocols.⁴² In particular, *Galloway* avoids problems relating to tracking protocol session interactions.⁴³ *Galloway* addresses these problems by providing a method of monitoring communications established over a network between respective pairs of entities for passing protocol data units.⁴⁴ The Appellants respectfully submit that the problems and teachings associated with copying call information are vastly different from the problems and teachings associated with generating call records for connections conducted in accordance with TCP/IP protocols. In addition, the Patent Office has failed to establish how the knowledge of one of ordinary skill in the art would provide the motivation to combine the references.

Ohran relates to recovering from a computer failure in a system with redundant computers where each of the redundant computers has its own mass storage system.⁴⁵ In particular, *Ohran* addresses the problems related to bringing a computer system which has failed into a state consistent with a server computer system that has continued operation during failure of the failed computer system.⁴⁶ *Ohran* solves this problem by switching a mass storage system

³⁸ *In re Dembiczak* 175 F.3d 994 (Fed. Cir. 1999).

³⁹ *See Chong*, col. 1, ll. 8-10.

⁴⁰ *Id.* at col. 1, ll.27-33.

⁴¹ *See Chong*, col. 1, ll. 36-40.

⁴² *See Galloway*, col. 1, ll. 10-11.

⁴³ *Id.* at col. 1, ll. 46-47.

⁴⁴ *Id.* at col. 1, ll. 58-61.

⁴⁵ *See Ohran*, col. 1, ll. 17-19.

⁴⁶ *Id.* at col. 2, ll. 38-43.

used for network requests from a failed server computer system to a server computer system which has not failed.⁴⁷ The Appellants respectfully submit that the problems and teachings related to copying call information differ significantly from the problems and teachings associated with recovering from a computer failure in a system with redundant computers. In a similar fashion, the problems and teachings which relate to generating call records for connections conducted in accordance with TCP/IP protocols are completely different from the teachings and problems associated with recovering from a computer failure in a system with redundant computers. Moreover, the Patent Office has failed to establish how the knowledge of one of ordinary skill in the art would provide the motivation to combine the references.

Additionally, the Patent Office has not established, through actual evidence, the motivation to combine the references. In particular, regarding combining *Chong* with *Galloway*, the Patent Office stated that there is motivation to combine the references “in order to maintain a detailed record of active media connections related to the statistics of the active call information in both directions.”⁴⁸ Furthermore, with respect to the combination of *Chong* and *Galloway* with *Ohran*, the Patent Office stated that there is motivation to combine the references “in order to eliminate the need for time consuming copying of information from primary to secondary/backup server and vice versa in keeping the record synchronized.”⁴⁹ The Patent Office has not provided any evidence in support of either of these asserted motivations.

Moreover, the proposed modification cannot change the principle of operation of a reference. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.⁵⁰ The Appellants respectfully submit that if *Ohran* was combined with *Chong* and *Galloway*, one or more of the references would have its principle of operation changed by the combination. The combination of *Chong* and *Galloway* alone changes the principle of operation of *Chong*. To further illustrate, *Chong* explicitly indicates that the active call server sends call information to the standby call server. Since *Chong* already has a mechanism to deliver information to the backup call server, this combination would change the principle of operation of *Chong*, and thus, the combination is

⁴⁷ *Id.* at col. 3, ll. 22-25.

⁴⁸ See Final Office Action mailed October 18, 2006, p. 6.

⁴⁹ *Id.* at 2006, p. 7.

⁵⁰ *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. (BNA) 349 (CCPA 1959)

non-obvious. Adding the backup computer system of *Ohran* that runs a mass storage access program that mirrors disks or storage devices on the backup computer system would further change the principle of operation of *Chong* (and *Galloway* and *Ohran* as well). Since the addition of *Ohran* would change the principle of operation of the references, the addition of *Ohran* to the combination is not proper. Therefore, for this reason and the reasons noted above, claims 1, 12-15, and 22 are allowable. Similarly, claims 6-11, and 17-20, which variously depend from either claim 1 or 15, are allowable.

E. Claims 2-5 and 16 Are Non-Obvious

Claims 2-5 and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Chong* in view of *Galloway* in view of *Ohran* and further in view of, according to the Patent Office, what would have been obvious to one of ordinary skill in the art at the time of the invention. The Appellants respectfully traverse the rejection.

As discussed above, claims 1 and 15, the base claims from which claims 2-5 and 16 ultimately depend, are patentable over the cited references. In addition, the Appellants respectfully submit that the knowledge of one skilled in the art does not overcome the previously noted shortcomings of either *Chong*, *Galloway*, or *Ohran*. Therefore, claims 2-5 and 16 are patentable over the cited references.

F. Claims 21 and 23 Are Patentable Over *Arango* In View of *Ohran*

1. Neither *Arango* nor *Ohran*, Either Alone or in Combination, Disclose or Suggest a Backup Call Server Which Sends a Request to a Media Gateway for Information

Claims 21 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Arango* in view of *Ohran*. The Appellants respectfully traverse the rejection.

Claim 21 recites a first media gateway comprising, among other features, a processor operable to “receive, from a backup call server, a request for information regarding said media flow.” As correctly pointed out by the Patent Office, *Arango* does not disclose this feature.⁵¹ Likewise, as outlined above, *Ohran* fails to disclose or suggest a backup server, instead, *Ohran* discloses a backup computer. Furthermore, as detailed above, *Ohran* does not disclose or

⁵¹ See Final Office Action mailed October 18, 2006, p. 12.

suggest that the backup computer sends a request for information regarding a media flow. As such, claim 21 is patentable over *Arango* and *Ohran*.

Claim 23 recites a backup call server which is operable to “send a request, to said media gateway, for information regarding an active media connection terminated at said primary server.” As correctly pointed out by the Patent Office, *Arango* does not disclose this feature.⁵² Similarly, *Ohran*, as detailed above, fails to disclose or suggest a backup call server which sends a request to a media gateway for information regarding an active media connection terminated at a primary server. Thus, claim 23 is patentable over the cited references.

2. There Is No Motivation To Combine *Arango* with *Ohran*

There is no motivation to combine *Arango* with *Ohran*. Both the nature of the problem to be solved and the teachings in *Arango* differ from the problem to be solved and the teachings in *Ohran*. *Arango* relates to managing media sessions.⁵³ More specifically, *Arango* addresses problems associated with conventional voice over packet-based network systems.⁵⁴ *Arango* addresses these problems by providing a communication system that provides telephone service over a packet based network to subscribers connected to circuit switched switching offices.⁵⁵ As detailed above, *Ohran* relates to recovering from a computer failure in a system with redundant computers where each of the redundant computers has its own mass storage system. The Appellants respectfully submit that the problems and teachings associated with conventional voice over packet-based networks is vastly different from the problems and teachings associated with recovering from a computer failure in a system with redundant computers where each of the redundant computers has its own mass storage system. Moreover, the Patent Office has failed to establish how the knowledge of one of ordinary skill in the art would provide the motivation to combine the references.

Furthermore, the Patent Office has not established, through actual evidence, the motivation to combine the references. In particular, the Patent Office stated that there is motivation to combine the references “in order to eliminate the need for time consuming copying of information from primary to secondary/backup server and vice versa in keeping the record

⁵² *Ibid.*

⁵³ See *Arango*, col. 1, ll. 14-15.

⁵⁴ *Id.* at col. 1, ll. 25-27.

⁵⁵ *Id.* at col. 12, ll. 50-53.

synchronized.”⁵⁶ The Patent Office has not provided any evidence in support of this asserted motivation. Therefore, for this reason and the reasons noted above, claims 21 and 23 are allowable.

G. Conclusion

As set forth above, none of the cited references, either alone or in combination, discloses or suggests a backup call server which sends a request to a media gateway for information regarding an active media session. Furthermore, the Patent Office has not established any motivation to combine the references. As such, the Appellants request that the Board reverse the Examiner and instruct the Examiner to allow the claims.

Respectfully submitted,

WITHROW & TERRANOVA, P.L.L.C.

By:



Steven N. Terranova

Registration No. 43,185

100 Regency Forest Drive, Suite 160

Cary, NC 27518

Telephone: (919) 238-2300

Date: April 13, 2007

Attorney Docket: 7000-500

⁵⁶ See Final Office Action mailed October 18, 2006, pp. 12 and 13.

(8) CLAIMS APPENDIX

1. At a backup call server in a packet-based telephony network, a method of maintaining a record of an active media connection comprising:
 sending a request, from the backup call server, to a media gateway, for information regarding said active media connection; and
 receiving said information at the backup call server.
2. The method of claim 1 wherein said sending comprises formulating said request using a network management protocol.
3. The method of claim 2 wherein said network management protocol is a Simple Network Management Protocol.
4. The method of claim 2 wherein said network management protocol is a Media Gateway Control Protocol.
5. The method of claim 2 wherein said network management protocol is a Session Initiation Protocol.
6. The method of claim 1 further comprising storing said received information in a memory.
7. The method of claim 1 further comprising repeating said sending at a predetermined interval.
8. The method of claim 1 wherein said received information includes an identification of a device originating said active media connection.
9. The method of claim 1 wherein said received information includes an indication of a duration of time said active media connection has been active.

10. The method of claim 1 wherein said received information includes an indication of a coding algorithm used for said active media connection.

11. The method of claim 1 wherein said received information includes an indication of Quality of Service setting associated with said active media connection.

12. A backup call server operable to:
send a request, to a media gateway, for information regarding an active media connection; and
receive said information at the backup call server.

13. A computer readable medium containing computer-executable instructions which, when performed by a processor in a backup call server in a packet-based telephony network, cause the processor to:
send a request, from the backup call server to a media gateway, for information regarding an active media connection; and
receive said information at the backup call server.

14. At a backup call server in a packet-based telephony network, a method of acquiring a record of an active media connection comprising:
receiving an indication of a failure of a primary call server, said primary call server, prior to said failure, supporting said active media connection;
responsive to said receiving, sending a request, from the backup call server to a media gateway, for information regarding said active media connection; and
receiving said information at the backup call server.

15. At a media gateway in a packet-based telephony network, a method of providing a record of an active media connection comprising:
receiving, from a backup call server, a request for information regarding said active media connection; and

responsive to said request, transmitting information regarding said active media connection to said backup call server.

16. The method of claim 15 wherein said request is received using a Simple Network Management Protocol.

17. The method of claim 15 wherein said transmitted information includes a network address of a device originating said active media connection.

18. The method of claim 15 wherein said transmitted information includes an indication of a duration of time said active media connection has been active.

19. The method of claim 15 wherein said transmitted information includes an indication of a coding algorithm used for said active media connection.

20. The method of claim 15 wherein said transmitted information includes an indication of Quality of Service setting associated with said active media connection.

21. A first media gateway comprising:
a receiver for receiving an incoming media flow;
a digital signal processor communicatively connected to said receiver for processing said media flow;
a transmitter communicatively connected to said digital signal processor for transmitting said media flow to a second media gateway; and
a processor operable to:
receive, from a backup call server, a request for information regarding said media flow; and
responsive to said request, transmit information regarding said media flow to said backup call server.

22. A computer readable medium containing computer-executable instructions which, when performed by a processor in a media gateway, cause the processor to:

receive, from a backup call server, a request for information regarding an active media connection; and

responsive to said request, transmit information regarding said active media connection to said backup call server.

23. A packet-based telephony network system comprising:

a packet based data network;

a telephone station apparatus;

a media gateway communicatively connected to said telephone station apparatus and said data network;

a primary call server communicatively connected, over said data network, to said media gateway; and

a backup call server communicatively connected, over said data network, to said media gateway and operable to:

send a request, to said media gateway, for information regarding an active media connection terminated at said primary server; and

receive said information.

24. (Cancelled).

(9) EVIDENCE APPENDIX

The Appellants rely on no evidence, thus this appendix is not applicable.

(10) RELATED PROCEEDINGS APPENDIX

As there are no related proceedings, this appendix is not applicable.